

United States Patent [19]

Borcherdt et al.

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[54] GENERAL EARTHQUAKE OBSERVATION SYSTEM

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[58] Field of Search 364/420, 421, 200 MS File, 364/900 MS File

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[57] ABSTRACT

A computerized, automatic, portable general earthquake observation system is disclosed. The system includes a microprocessor and associated computer program stored in program memory, which control other components of the system through a computer bus. Input channels for receiving signals from sensors are connected to a signal conditioning module which is selectively coupled to an analog-to-digital conversion module, both under control of the microprocessor. A pre-event data memory module stores the digitized signals sent along a separate data bus by the analog-to-digital conversion module. Data stored in data memory module is analyzed by the microprocessor for information regarding disposition of data which includes archival storage on an internal data recorder using the data bus or transmission to desired external recorder using various possible modems. The microprocessor is also connected to an external time reference module, an automatic calibration module, and an operator interface module.

15 Claims, 12 Drawing Figures

